

Amendments to the Claims:

A listing of the entire set of pending claims (including amendments to the claims, if any) is submitted herewith per 37 CFR 1.121. This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims

1. (Currently Amended) An integrated circuit comprising a plurality of modules and a network arranged for transferring messages between said modules wherein a message issued by a first module M comprises first information indicative of a location of **one of said modules S being [[an]]** addressed **[[module S]]** within the network, and second information indicative of a **particular** location within the addressed module S, **such as a memory, or a register address,** the integrated circuit comprising
 - at least one address translation means for receiving said message issued by said first module M comprising said first and second information and arranging the first and the second information as a single address,
 - wherein said address translation means is adapted to:
 - determine which module S is being addressed in said received message based on said first information of said single address, and
 - further determine **[[the]] the particular [[selected]]** location **within [[of]]** the addressed module S based on said second information of said single address,
 - arranging, at said translation unit, the first and the second information comprising said message as a single address,
 - determining, at **[[said]] a** translation unit, which addressed module S is being addressed in said message issued from said first module M based on said single address, and

further determining, at said translation unit, further determine ~~[[the]]~~ the particular [[selected]] location within ~~[[of]]~~ the addressed module S based on said single address.

2. (Currently Amended) Integrated circuit according to claim 1, further comprising: at least one network interface means associated to one of the modules for managing communication between one of said associated modules and the network, wherein one of said address translation means is arranged in one of said interface means.
3. (Original) Integrated circuit according to claim 2, wherein said address translation means is arranged in said interface means associated to said first module.
4. (Previously Presented) Integrated circuit according to claim 2, wherein said address translation means comprises an address mapping table configured to store relations between global and local memory mapping.
5. (Original) Integrated circuit according to claim 4, wherein said address mapping table contains fields for every channel of a connection, for network interface ports of a connection, and for local addresses in addressed modules.
6. (Currently Amended) Method for exchanging messages in an integrated circuit comprising a plurality of modules, the messages between the modules being exchanged via a network wherein a message issued by a first module M comprises first information indicative of ~~[[for]]~~ a location of one of said modules S being ~~[[an]]~~ addressed ~~[[module S]]~~ within the network, and second

information indicative of a **particular** location within the addressed module S₁
such as a memory, or a register address, the method including the steps of:

said first module M issuing a message to an address translation unit,
arranging, at said translation unit, the first and the second information
comprising said message as a single address,
determining, at said translation unit, which module S is being addressed in
said message issued from said first module M based on said single address, and
further determining, at said translation unit, the **particular** **[[selected]]**
location **within** **[[of]]** the addressed module S based on said single address.

7. (Currently Amended) The method according to claim 6, wherein **[[said]]** **a**
network interface **[[means]]** is associated with one of said master and addressed
modules.
8. (Currently Amended) The method according to claim **[[5]]** **6**, wherein
communication between said plurality of modules is performed over connections.
9. (Previously Presented) The method according to claim 8, wherein a connection
comprises a set of channels, each channel having a set of connection properties
between a first module and at least one second module.
10. (Previously Presented) The method according to claim 8, wherein connection
types comprise: simple connections, multicast connections, narrowcast
connections.
11. (Previously Presented) The method according to claim 9, wherein said
connection properties comprise: ordering, flow control, throughput, latency,

lossiness, transmission termination, transaction completion, data correctness, priority and data delivery.

12. (Previously Presented) The method according to claim 10, wherein said simple connection is a connection between a message sending module and a single addressed module.
13. (Previously Presented) The method according to claim 10, wherein said multicast and narrowcast connections are connections between a message sending module and one or more addressed modules.
14. (Currently Amended) The method according to claim [[1]] **10**, wherein **said one of said modules being addressed** ~~the addressed module~~ has an address comprised of a global and a local address.
15. (Currently Amended) The method according to claim [[2]] **7**, wherein said at least one network interface means comprises at least two network interface ports to allow a module associated with said at least one network interface to communicate with a router network or at least one other module from among said plurality of modules.
16. (Currently Amended) Integrated circuit according to claim 2, wherein said ~~at least one~~ network interface means is configured to send read and write requests and operations between at least one other network interface over the network.